TYPE, FIGURED AND MENTIONED FOSSIL PLANTS IN THE QUEENSLAND MUSEUM

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The Queensland Museum holds a small collection of plant megafossils. No palynological material is held in our collections. Most of the material referred to in this list was studied by Walkom (1924) in a paper on the Middle Triassic Esk flora. In total, seven new species of lossil plants have been described from the Museum's collections since 1911.

The material is catalogued taxonomically and the classification generally follows that of Scagel et al. (1965) and Pant (1957). Reference is made to specimens from the Museum's collection and only literature pertaining directly to those specimens is included in this list. While a comprehensive treatment of the literature concerning the Museum's material is intended, it is anticipated that there will be omissions. The author has generally avoided commenting about the taxonomic status of specimens unless it seemed expedient to do so.

Information for each specimen includes the Queensland Museum registration number, a list of chronologically arranged references, locality, and data on the age and formation from which the specimen was collected. The dating of formations follows that of Day et al. (1983). An alphabetically arranged index of taxonomic names allows reference to the specimens in this paper.

The types are treated in the same way as the other material. Nearly all specimens were labelled as types, the one exception being the partial counterparts of Nilssonia superba Walkom, 1924, that had been misplaced in the general collection. The holotype of Chiropteris cuneuta (Carruthers) Seward 1903 was erroneously recorded as being in the Queensland Museum Collection (Tenison-Woods 1883; Feistmantel 1890). The specimen to which Tenison-Woods was probably referring has been included for the sake of completeness but the holotype is in the British Museum.

Division ARTHROPHYTA Order EQUISETALES

Lelstotheca sp.

Reg. No.: F985.

Annularia stellata (Schloth.), in Walkom, 1916. pp. 233-4, pl. 25.

Loc.: 8 miles from Dunedoo, N S.W.

Fm.: ? Age: Permian.

Remarks: Walkom (1938) compared this specimen to *Phyllotheca robusta* Feistmantel, 1880. *Phyllotheca robusta* Feistmantel 1880 was combined in *Stellotheca robusta* by Surange and Prakash (1962). The name *Stellotheca* was found to be illegimate under articles 64, 73 and 75 of the International Code of Botanical Nomenclature. and Maheshwari (1972) proposed the new genus *Lelstotheca* to accommodate plants previously referred to *Stellotheca*. Surange and Prakash (1962) and Maheshwari (1974) have both commented on the similarity of F985 to *Stellotheca* and *Lelstotheca* respectively.

The specimen figured by Walkom (1916) is similar to *Lelstotheca robusta* but differs in possessing a greater number of leaflets (18-20) per whorl. F985 is assigned to *Lelstotheca* sp. until a detailed study of the plant can be made.

Neocalamites carrerei (Zeiller) Halle, 1908

Reg. No.: F1487.

Schizoneura sp.a Seward, in Walkom, 1924. pp. 80-1. Schizoneura sp.a Seward, in Jones and de Jersey, 1947.

Neocalamites currerei (Zeiller) Halle, 1908, in Rigby, 1977, p. 320, 322.

Loc.: Near Portion 42, Wivenhoe Parish, Bellevue Station, near Esk. SE.Q.

Fm.: Esk Fm. Age: Middle Triassic.

Reg. No.: F1533,

Schizoneura sp. Seward, 1908, in Hill et al., 1965. P1. T1, 4.

Loc.: Portion 39, Wivenhoe Parish, Bellevue Station near Esk, SE.O.

Fm.: Esk Fm. Age: Middle Triassic.

Remarks: F1533 is assignable to Neocalamites carrerei (Zeiller) Halle, 1908.

Reg. No.: F1535.

Schizoneura sp.a Seward, in Walkom, 1924. pp. 80-1, pl. 16, fig. 2.

Schizoneura sp.a Seward, in Jones and de Jersey, 1947. p. 10.

Neocalamites carrerei (Zeiller) Halle, 1908, in Rigby 1977, pp. 320, 322.

Loc.: Portion 39, otherwise as for F1487.

Fm.: Esk Fm. Age: Middle Triassic.

Remarks: Erroneously labelled F1533 in Walkom (1924).

Reg. No.: F1554.

Schizoneura sp.a Seward, in Walkom, 1924. pp. 80-1, pl. 16, fig. 1.

Schizoneura sp.a Seward, in Jones and de Jersey 1947. p. 10.

Neocalamites carrerei (Zeiller) Halle, 1908, in Rigby, 1977. pp. 320, 322.

Loc.: Portion 42 otherwise as for F1487,

Fm.: Esk Fm. Age: Middle Triassic.

Neocalamites sp. cf. N. carrerei (Zeiller) Halle, 1908.

Reg. No.: F2505.

Neocalamites cf. carrerei (Zeilfer) Halle, in Hill et al., 1965, pl. Tl, 3.

Loc.: Denmark Hill, Ipswich, SE.Q.

Fm.: Ipswich Coal Measures. Age: Early late Triassic (Carnian).

Neocalamites hoerensis (Schimper) Halle, 1908.

Reg. No.: F1485 a/b.

Neocalamites hoerensis (Schimper) in Walkom, 1924. p. 79, pl. 15, fig. 1.

Neocalamites hoerensis (Schimper) Halle, in Harris, 1931. pp. 22-5.

Neoculamites hoerensis (Schimper) Halle, 1908, in Rigby, 1977, p. 320.

Loc.: Portion 32, Northbrook Parish, Bellevue Station, Near Esk, SE.Q.

Fm.: Esk Fm. Age: Middle Triassic.

Phyllotheca sp.

Reg. No.: F1539 a/b/c.

Schizoneura cf. africana Feistm., in Walkom, 1924. pp. 79-80 text fig. 1.

Phyllotheca sp., in Rigby, 1977. p. 320, 322.

Loc.: Portion 42, Wivenhoe Parish, Bellevue Station, near Esk, SE.O.

Fm.: Esk Fm. Age: Middle Triassic.

Division LYCOPHYTA Order PLEUROMEIALES

pleuromeiid rhizophore

Reg. No.: F12324.

pleuromeiid rhizophore in Turner, 1984. pp. 90-3, pl. 1. Loc.: The Crater, Rewan Station, 72 kms south of Rolleston, SE.Q.

Fm.: Arcadia Fm., Rewan Group. Age: Early Triassic.

Division PTEROPHYTA Order MARATTIALES Family MARATTIACEAE

Asterotheca hillae (Walkom) Herbst, 1977.

Reg. No.: F1566.

Asterotheca hillae (Walkom) Herbst, 1977. p. 7. Loc.: Bellevue Station, via Esk, SE.Q. Fm.: Esk Fm. Age: Middle Triassic.

Reg. No.: F1579.

Asterotheca liillae (Walkom) Herbst, 1977, p. 7. Loc.: Bellevue Station, near Esk, SE.O.

Fm.: Esk Fm. Age: Middle Triassic.

Reg. No.: F1582. HOLOTYPE.

Pecopteris (?Asterotheca) hillae Walkom, 1924. pp. 82-4, pl. 17, fig. 1 A.B. 2-3.

Pecopteris (?Asterotheca) hillae Walkom, in Walkom, 1928. pp. 461-2.

Asterotheca hillae (Walkom) Herbst, 1977. pp. 6-7. Asterotheca hillae (Walkom) Herbst, 1977, in Rigby, 1977. p. 320, 322.

Loc.: Bellevue Station, via Esk, Wivenhoe Parish, SE.Q.

Fm.: Esk Fm. Age: Middle Triassic.

Reg. No.: F1713.

Asterotheca hillae (Walkom) Herbst, 1977. p. 7.

Loc.: Portion 42, Wivenhoe Parish, near Esk, SE.O.

Fm.: Esk Fm. Age: Middle Triassic.

Reg. No.: F3955 a/b.

'Pecopteris' (Asterotheca) hillae Walkom, 1924, in Hill et al., 1965. pl. T3, fig. 4.

Asterotheca hillae (Walkom) Herbst, 1977. p. 6.

Loc.: Bryden, SE.O.

Fm.: Bryden Beds. Age: Early to Middle Triassic.

?Family MARATTIACEAE Ogmos adinus Webb, 1983.

Reg. No.: F1481.

Taeniopteris (?Danaeopsis) crassinervis (Feistm.) in Walkom, 1924. pp. 84-5, pl. 18, fig. 2.

Taeniopteris crassinervis (Feistmantel) in Du Toit, 1927. pp. 350-1.

Taeniopteris cf. crassinervis (Feistmantel) Walkom, in Jones & de Jersey, 1947. p. 47.

Taeniopteris crassinervis (Feistmantel) Walkom, in Hill et al., 1965. pl. T8, fig. 3.

Taeniopteris crassinervis (Feistmantel) Walkom, 1917, in Rigby, 1977. p. 321.

Ogmos adinus Webb, 1983. pp. 363-71.

Loc.: Bellevue Station, near Esk, SE.Q.

Fm.: Esk Fm. Age: Middle Triassic.

Reg. No.: F1530.

Ogmos adinus Webb, 1983. pp. 363-71.

Loc.: As for F1481.

Fm.: Esk Fm. Age: Middle Triassic.

Reg. No.: F1558.

Ogmos adinus Webb, 1983. pp. 363-71.

Loc.: As for F1481.

Fm.: Esk Fm. Age: Middle Triassic.

Reg. No.: F1562.

Ogmos adinus Webb, 1983, pp. 363-71, fig. 5b.

Loc.: As for F1481.

Fm.: Esk Fm. Age: Middle Triassic.

Reg. No.: F1566.

Ogmos adinus Webb, 1983. pp. 363-71.

Loc.: As for F1481.

Fm.: Esk Fm. Age: Middle Triassic.

Reg. No.: F1577.

Taeniopteris (?Danaeopsis) crassinervis (Feistm.) in Walkom, 1924. pp. 84-5, pl. 18, fig. 1.

Taeniopteris crassinervis (Feistmantel) in Du Toit, 1927.

Taeniopteris cf. crassinervis (Feistmantel) Walkom, in Jones & de Jersey, 1947. p. 47.

Taeniopteris crassinervis (Feistmantel) Walkom, 1917, in Rigby, 1977. p. 321.

Ogmos adinus Webb, 1983. pp. 363-71.

Loc.: Portion 42, Wivenhoe Parish, Bellevue Station, near Esk, SE.Q.

Fm.: Esk Fm. Age: Middle Triassic.

Reg. No.: F1578.

Ogmos adinus Webb, 1983. pp. 363-71.

Loc.: As for F1481.

Fm.: Esk Fm. Age: Middle Triassic.

Order FILICALES Family DICKSONIACEAE

Coniopteris sp.

Reg. No.: F5693.

Coniopteris sp., in Hill et al., 1966. pl. J2, fig. 2.

Loc.: Reynolds Creek, Portion 148, Fassifern

Parish, SE.Q.

Fm.: Walloon Coal Measures. Age: Middle Jurassic.

Reg. No.: F5694.

Coniopteris sp., in Hill et al., 1966. pl. J2, fig. 3.

Loc.: as for F5693.

Fm.: Walloon Coal Measures. Age: Middle

Jurassic.

Family D1PTERIDACEAE

Dictyophyllum davidii Walkom, 1917.

Reg. No.: F1468.

Dictyophyllum rugosum L. & H. in Walkom, 1924. p. 82, pl. 21, fig. 1.

Thaumatopteris rugosa (Lindley & Hutton) Oishi &

Yamasita, 1936. pp. 152-3.

Dictyophyllum davidii Walkom, 1917, in Rigby, 1977. pp. 320, 322.

Dictyophyllum davidii Walkom, 1917, in Herbst, 1979. pp. 13-4.

Dictyophyllum davidii Walkom, 1917, in Webb, 1982. pp. 85-9.

Loc.: Portion 42, Wivenhoe Parish, Bellevue Station, near Esk SE.Q.

Fm.: Esk Fm. Age: Middle Triassic.

Hausmannia (Protorhipis) sp. cf. H. (P.) defarrariisii Feruglio 1937.

Reg. No.: F2901.

Hausmannia (Protorhipis) sp. cf. H. (P.) defarrariisii Feruglio, 1937, in Herbst, 1979. pp. 18-9.

Loc.: Kleinton Clay Pit, via Toowoomba, SE.Q. Fm.: Walloon Coal Measures. Age: Middle Jurassic.

Reg. No.: F2905 a/b.

Hausmunnia (Protorhipis) sp. cf. H. (P.) defarrariisii Feruglio, 1937, in Herbst, 1979, pp. 18-9.

Loc.: Near Kalbar, Fassifern Parish, SE.Q. Fm.: Walloon Coal Measures. Age: Middle Jurassic.

Family GLEICHENIACEAE

Gleichenites wivenhoensis Herbst, 1974.

Reg. No.: F6993 a/b. HOLOTYPE.

Gleichenites wivenhoensis Herbst, 1974. pp. 79-82, pl. 9, figs 7, 8, pl. 10, fig. 11, text figs. 1, 2.

Loc.: Northern side of Wivenhoe Hill, Parish of Wivenhoe, SE.Q.

Fm.: Esk Fm. Age: Middle Triassic.

Reg. No.: F7006. PARATYPE.

Gleichenites wivenhoensis Herbst, 1974. pp. 79-82, text figs. 1, 2.

Loc.: As for F6992.

Fm.: Esk Fm. Age: Middle Triassic.

Family MATONIACEAE

Phlebopteris alethopteroides Etheridge fil. 1888.

Reg. No.: F1277.

Phlebopteris alethopteroides Etheridge fil., 1888, in Walkom, 1917. p. 8, pl. 9, fig. 2.

Loc.: Fassifern, SE.Q.

Fm.: Walloon Coal Measures. Age: Middle Jurassic.

Reg. No.: F1278.

Phlebopteris alethopteroides Etheridge fil., 1888, in Walkom, 1917. p. 8, pl. 10, fig. 1.

Loc.: As for F1277.

Fm.: Walloon Coal Measures. Age: Middle Jurassic.

Family OSMUNDACEAE

Cladophlebis australis (Morris) Seward, 1904.

Reg. No.: F1582.

Cladophlebis australis (Morris), in Walkom, 1924. p. 81, pl. 17, fig. 1E.

Cladophlebis australis (Morris) Seward, 1904, in Rigby, 1977. p. 320.

Cladophlebis australis (Morris) Walkom, in Herbst, 1978. pp. 5-12.

Loc.: Wivenhoe Parish, Bellevuc Station, near Esk, SE.O.

Fm.: Esk Fm. Age: Middle Triassic.

Lobifolia dejerseyi Retallack, 1977.

Reg. No.: F1473.

Cladophlebis lobifolia (Phillips), in Walkom, 1924. p. 81, text fig. 2.

Lobifolia dejerseyi Retallack, et al., 1977. pp. 88-9. Cladophlebis sp. A, in Rigby, 1977. p. 320, 322. Cladophlebis lobifolia (Phillips), in Herbst, 1978. pp. 19-70.

Loc.: Portion 42, Wivenhoe Parish, Bellevue Station, near Esk, SE.Q.

Fm.: Esk Fm. Age: Middle Triassic.

Remarks: Both Rigby (1977) and Herbst (1978) were unsure of the status of this material from the Esk Series. Retallack et al. (1977) proposed the new species Lobifolia dejerseyi to accommodate these specimens from the Esk Series and others from the Nymboida Coal Measures and the Gunnee Beds of New South Wales.

Reg. No.: F1544.

Cladophlebis lobifolia (Phillips), in Walkom, 1924. p. 81, pl. 15, fig. 2, text fig. 2.

Lobifolia dejerseyi Retallack et al., 1977. pp. 88-9. Cladophlebis sp. A, in Rigby, 1977. p. 322.

Cladophlebis lobifolia (Phillips), in Herbst, 1978. pp. 19-20.

Loc.: Portion 24, Esk Parish, Bellevue Station. SE.O.

Fm.: Esk Fm. Age: Middle Triassic.

Remarks: As for F1473.

Family SCHIZEACEAE

Lygodium skottsbergii Halle, 1940.

Reg. No.: F2820.

Lygodium skottsbergii Halle, 1940, in Hill et al., 1970. pl. Cz X1, fig. 1.

Loc.: Clay Pit, Dinmore, SE.Q.

Fm.: Redbank Plains Fm. Age: Paleocene.

Remarks: Specimen missing.

fern (aff. Lygodium)

Reg. No.: F9514.

fern (aff. Lygodium?) in Peters and Christophel, 1978. p. 3127, fig. 18.

Loc.: Lovell Downs Station, 50 kms NW of Winton, 22°12'00' S, 142°31'30' E, W.C.Q. Fm.: Winton Fm. Age: Early late Cretaceous

(Albian-Cenomanian).

Filicales incertae sedis

Chiropteris cuneata (Carruthers) Seward, 1903.

Reg. No.: F12849.

Cyclopteris cuneata Carruthers, 1872, in Tenison-Woods, 1883. p. 109.

Cyclopteris cuneata Carruthers, 1872, in Feistmantel, 1890, p. 108.

Loc.: Tivoli Coal Mine, Ipswich SE.O.

Fm.: Ipswich Coal Measures. Age: Early late

Triassic (Carnian).

Remarks: Tenison-Woods (1883),Feistmantel (1890) referring to Tenison-Woods (1883), recorded that the holotype of Cyclopteris cuneata was in the Brisbane (i.e. Queensland) Museum. However, Seward (1903) indicated that the holotype of C. cuneata is in the British Museum. The Queensland Museum specimen, Tenison-Woods is probably referring to is similar, but smaller and less well preserved than the holotype figured by Carruthers (1872). Dr C R. Hill (pers. comm.) has advised the author that a specimen V.4197 matching Carruthers original figure, although laterally reversed is in the British Museum (Natural History), F12849 previously unregistered.

Division PTERIDOSPERMOPHYTA Family CORYSTOSPERMACEAE

Dicroidium zuberi (Szajnocha) Archangelsky 1968 var. feistmantelii (Johnston) Gothan, 1912.

Reg. No.: F1468.

Thinnfeldia feistmanteli Johnston, in Walkom, 1924. pp. 81-2.

Zuberia sahnii Sew. sp., in Frenguelli, 1943. pp. 305-6. Zuberia barreulensis Frenguelli, 1944. pp. 20-3.

Dicroidium feistmanteli (Johnston) Gothan, 1912, in Townrow, 1957, pp. 39-41.

Dicroidium feistmantelii (Johnston) Gothan, 1912, in Rigby, 1977, p. 320.

Dicroidium zuberi (Szajnocha) Archangelsky 1968 var feistmantelii (Johnston) Retallack 1977, p. 272, frames 115 - 116.

Loc.: Portion 42, Wivenhoe Parish, near Esk, SE.Q.

Fm.: Esk Fm. Age: Middle Triassic.

Rcg. No.: F1472.

Thinnfeldia feistmanteli Johnston, in Walkom, 1924. pp. 81-2.

Zuberia sahnii Sew. sp., in Frenguelli, 1943. pp. 305-6. Zuberia harrealensis Frenguelli, 1944. pp. 20-3.

Dicroidium feistmanteli (Johnston) Gothan, 1912, in Townrow, 1957, pp. 39-41.

Dicroidium feistmantelii (Johnston) Gothan, 1912, in Rigby, 1977, p. 320.

Dicroidium zuberi (Szajnocha) Archangelsky 1968 var feistmantelii (Johnston) Retallack 1977, p. 272, frames 115 – 116.

Loc.: Bellevue, via Esk, SE.Q.

Fm.: Esk Fm. Age: Middle Triassic.

Remarks: Specimen missing.

Rcg. No.: F1582.

Thinnfeldia feistmanteli Johnston, in Walkom, 1924. pp. 81-2, pl. 17, fig. 1, f.

Zuberia salmii Sew. sp.,in Frenguelli, 1943. pp. 305-6. Zuberia barrealensis Frenguelli, 1944. pp. 20-3.

Dicroidium feistmanteli (Johnston) Gothan, 1912, in Townrow, 1957, pp. 39-41.

Dicroidium antevsiana (Johnston) Gothan, 1912, in Anderson and Anderson, 1970. Chart 9.

Dicroidium feistmantelii (Johnston) Gothan, 1912, in Rigby, 1977, p. 320.

Dicroidium zuheri (Szajnocha) Archangelsky 1968 var feistmantelii (Johnston) Retallack 1977, p. 272, frames 115 - 116.

Loc.; as for F1468.

Fm.: Esk Fm. Age: Middle Triassic.

Dicroidium odontopteroides (Morris) Gothan, 1912.

Reg. No.: F1472.

Thinnfeldia lancifolia (Morris), in Walkom, 1924. p.

Dicroidium odontopteroides (Morris) Gothan, 1912, in Townrow, 1957, pp. 33-9.

Loc.: Portion 42, Wivenhoe Parish, near Esk, SE.O.

Fm.: Esk Fm. Age: Middle Triassic.

Remarks: Specimen missing.

Reg. No.: F1546.

Thinnfeldia lancifolia (Morris), in Walkom, 1924. p. 82.

Dicroidium odontopteroides (Morris) Gothan, 1912, in Townrow, 1957, pp. 33-9.

Loc.: Portion 24, Esk Parish, near Esk, SE.Q. Fm.: Esk Fm. Age: Middle Triassic.

Pteruchus africanus Thomas, 1933.

Reg. No.: F954.

Stachyopitys annularoides Shirley, in Walkom, 1917. p. 13, pl. 4, fig. 6.

Pteruchus (Stachyopitys) annularoides in Thomas, 1933, p. 234, 241.

Pteruchus africanus Thomas, 1933 in Townrow, 1962. p. 297. Loc.: Nundah, Brisbane, SE.Q.

Fm.: Ipswich Coal Measures. Age: Early late

Triassic (Carnian).

Umkomasia sp.

Reg. No.: F1582.

gymnospermous seed in Walkom, 1924. p. 90, pl. 17. fig. 1D.

Loc.: Portion 42, Wivenhoe Parish, near Esk, SE.O.

Fm: Esk Fm. Age: Middle Triassic.

Remarks: The cupulate form and branching habit of this fructification indicates that it belongs to the Corystospermaceae. It represents the first corystospermacid fructification to be recognized from the Esk Series and is tentatively referred to *Umkomasia* sp.

Family PELTASPERMACEAE

Lepidopteris stormbergensis (Seward) Townrow, 1956.

Reg. No.: F1583.

Thinnfeldia lancifolia (Morris), in Walkom, 1924. p. 82, pl. 15, fig. 3.

Dicroidium odontopteroides (Morris) Gothan, in Townrow, 1957. pp. 33-9.

Dicroidium lancifolia (Morris) Gothan, 1912, in Anderson & Anderson, 1970. Chart 9.

Lepidopteris stormbergensis (Seward) Townrow, 1956, in Rigby, 1977. pp. 320, 322.

Loc.: Bellevue Station, near Esk, SE.Q. Fm.: Esk Fm. Age: Middle Triassic.

Remarks: Specimen missing.

Reg. No.: F1580.

? Sphenopteris pecten Halle, in Walkom, 1924. p. 86. Dicroidium superbum (Shirley) Townrow 1957, in Retallack et al., 1977. p. 95.

Lepidopteris stormbergensis (Seward) Townrow, 1956, in Rigby, 1977. pp. 320, 322.

Loc.: Portion 42, Esk Parish, Bellevue Station, near Esk, SE.Q.

Fm.: Esk Fm. Age: Middle Triassic.

Reg. No.: F1551.

(?) Sphenopteris superba Shirley, in Walkom, 1924. p. 86.

Dicroidium superbum (Shirley) Townrow, 1957, in Retallack et al., 1977. p. 95.

Lepidopteris stormbergensis (Seward) Townrow, 1956, in Rigby, 1977. pp. 320, 322.

Loc.: as for F1580.

Fm.: Esk Fm. Age: Middle Triassic.

Division CYCADOPHYTA Order CYCADALES

Nilssonia mucronatum (de Vis) Walkom, 1916.

Reg. No.: F967. HOLOTYPE.

Pterophylluni mucronatum de Vis, 1911. pp. 2-3, pl. 2, figs. 1, 2.

Nilssonia mucronatum (de Vis) Walkom, 1916. pp. 231-2, pl. 24, figs. 1-3.

Nilssonia mucronatum (de Vis) Walkom, 1916, in Walkom, 1919. pp. 34-5, pl. 6, figs. 1-3.

Loc.: O'Connell Creek, Wyangarie Station, south of Richmond, C.Q.

Fm.: Allaru Mudstone. Age: Early Cretaceous (Albian).

Remarks: The precise locality for this specimen is unknown. Wyangarie Station presumably refers to Wyangarie run, part of the Richmond Downs holdings in the 1890's. Old Wyangarie Homestead in 1896 was situated approximately 5 kms southeast of Richmond. The modern Wyangarie homestead is about 25 kms westnorthwest of Richmond. The holotype of Nilssonia mucronatum is figured here (Pl. 1, Fig. 2).

Pseudoctenis eathiensis (Richards) Seward, 1911.

Reg. No.: F1486 a/b.

Pseudoctenis eathiensis (Richards), in Walkom, 1924. p. 88, pl. 19, fig. 2.

Pseudoctenis eathiensis (Richards) Seward, 1911, in Rigby, 1977. p. 321.

Loc.: Portion 24, Esk Parish, Bellevue Station, near Esk, SE.Q.

Fm.: Esk Fm. Age: Middle Triassic.

Reg. No.: F1471.

Pseudoctenis eathiensis (Richards), in Walkom, 1924. p. 88.

Pseudoctenis eathiensis (Richards) Seward, 1911, in Rigby, 1977. p. 321.

Loc.: Portion 42, Wivenhoe Parish, Bellevue Station, near Esk, SE.Q.

Fm.: Esk Fm. Age: Middle Triassic.

Order BENNETTITALES

Pterophyllum nathanii Walkom, 1924.

Reg. No.: F1479 a/b. SYNTYPE.

Pterophyllum nathani Walkom, 1924. pp. 87-8, pl. 20. fig. 2.

Pterophyllum nathani Walkom, 1924, in Hill et al., 1965. pl. T7, fig. 2.

Pterophyllum nathanii Walkom, 1924, in Rigby, 1977. p. 321.

Loc.: Bellevue Station, Wivenhoe Parish, via Esk, SE.Q.

Fm.: Esk Fm. Age: Middle Triassic.

Reg. No.: F1480. SYNTYPE.

Pterophyllum nathani Walkom, 1924. pp. 87-8, pl. 20, fig. 1.

Pterophyllum nathanii Walkom, 1924, in Rigby, 1977. p. 321.

Loc.: As for F1479.

Fm.: Esk Fm. Age: Middle Triassic.

Cycadophyta Incertae sedis

Taeniopteris sp. cf. T. lata Oldham & Morris, 1863.

Reg. No.: F1463 a/b/c. HOLOTYPE.

(?Nilssonia) superba Walkom, 1924. pp. 86-7, pl. 19, fig. 1.

Taeniopteris sp. cf. T. lata Oldham & Morris, 1863, in Rigby, 1977. p. 321, 324.

Loc.: Bellevue Station, via Esk, Wivenhoe Parish, SE.Q.

Fm.: Esk Fm. Age: Middle Triassic.

Taeniopteris lentriculiforme (Etheridge Iil.) Walkom, 1917.

Reg. No.: F12783.

Taeniopteris carruthersi Tenison Woods, in Walkom, 1924. p. 85, text fig. 3.

Taeniopteris carruthersi Tenison Woods, 1883 in Retallack et al., 1977. pp. 102-3.

Taeniopteris lentriculiforme (Etheridge jr) Walkom, 1917, in Rigby, 1977. p. 321, 324.

Loc.: Portion 32, Northbrook Parish, Bellevue Station, near Esk, SE.O.

Fm.: Esk Fm. Age: Middle Triassic.

Remarks: The registration number F1486 was allocated to two specimens mentioned by Walkom (1924). To avoid possible confusion this specimen is re-registered as F12783.

Reg. No.: F1547.

Taeniopteris tenison-woodsi Etheridge Jr., in Walkom, 1924. p. 86.

Taeniopteris lentriculiforme (Etheridge jr) Walkom, 1917, in Rigby, 1977. p. 321, 324.

Loc.: Portion 42, Wivenhoe Parish, Bellevue Station, near Esk, SE.O.

Fm.: Esk Fm. Age: Middle Triassic.

Reg. No.: 1583.

Taeniopteris (?Danaeopsis) crassinervis (Feistm.) in Walkom, 1924. pp. 84-5, pl. 18, fig. 3.

Taeniopteris crassinervis (Feistmantel), in Du Toit, 1927, pp. 350-1.

Taeniopteris cf. crassinervis (Feistmantel) Walkom, in Jones & de Jersey, 1947. p. 47.

Taeniopteris lentriculiforme (Etheridge jr) Walkom, 1917, in Rigby, 1977, p. 321.

Loc.: Portion 24, Wivenhoe Parish, Bellevue Station, near Esk, SE.Q.

Fm.: Esk Fm. Age: Middle Triassic.

Order PENTOXYLALES pentoxylalean-like trunk

Reg. No.: F7078.

pentoxylalean-like trunk in Gould and Shibaoka, 1980. p. 16, 18, 20, fig. 7h.

Loc.: Miles, SE.O.

Fm.: Walloon Coal Measures. Age: Middle Jurassic.

Division GINKGOPHYTA Order GINKGOALES

Ginkgoites bidens (Tenison-Woods) Florin, 1936.

Reg. No.: F1470.

Baiera bidens Tenison-Woods, in Walkom, 1924, p. 90, pl. 21, fig. 2.

Baiera bidens (Ten.-Woods) Feistm. in Freuguelli, 1946. pp. 108-9.

Ginkgoites bidens (Tenison-Woods) Florin, 1936, in Rigby, 1977. p. 321.

Loc.: Portion 42, Wivenhoe Parish, Bellevue Station, near Esk, SE.Q.

Fm.: Esk Fm. Age: Middle Triassic.

probably Ginkgo digitata (Brongniart) Heer, 1877.

Reg. No.: F1553.

Ginkgoites sibirica? Heer, in Walkom, 1924. pp, 88-9, pl. 21, fig. 4.

Ginkgoites (?) sibirica Heer, in Walkom, 1928. p. 466. probably Ginkgo digitata (Brongniart) Heer, 1887, in Rigby, 1977. p. 321, 324.

Loc.: Portion 24, Esk Parish, Bellevue Station, near Esk, SE.O.

Fm.: Esk Fm. Age: Middle Triassic.

Remarks: Specimen missing.

Ginkgoites simmondsi (Shirley) Florin, 1936.

Reg. No.: F1488.

Baiera simmondsi (Shirley), in Walkom, 1924. p. 90. Ginkgoites simmondsi (Shirley) Florin, 1936, in Rigby, 1977. p. 321.

Loc.: Portion 24, Esk Parish, Bellevue Station, near Esk, SE.Q.

Fm.: Esk Fm. Age: Middle Triassic.

Ginkgoites sp.

Reg. No.: F1469.

Ginkgoites sp., in Walkom, 1924. p. 89, pl. 21, fig. 3B. Loc.: Portion 42, Wivenhoe Parish, Bellevue Station, SE.O.

Fm.: Esk Fm. Age: Middle Triassic.

Reg. No.: F1582.

Ginkgoites sp., in Walkom, 1924. p. 92, pl. 17, fig. 1C. Loc.: Wivenhoe Parish, Bellevue Station, near Esk SE.O.

Fm.: Esk Fm. Age: Middle Triassic.

Reg. No.: F1321. HOLOTYPE.

Noeggerathiopsis tryoni Shirley, 1920. pp. 82-3. fragmentary Ginkgo or Baiera, in Walkom, 1921. p. 375.

Loc.: Petrie's Quarry, Albion SE.Q. Fm.: Ipswich Coal Measures. Age: Early Late Triassic (Carnian).

Remarks: The International Code of Botanical Nomenclature 1972, p. 42, Art. 38 states that after the 1 Jan. 1912 the description of a new taxon of fossil plants must be accompanied by a figure or illustration. Shirley's description of *Noeggerathiopsis tryoni* was not accompanied by a figure and is therefore invalid. The specimen is figured herein (Pl. 1, Fig. 1). It is referable to *Ginkgoites* sp.

Reg. No.: F1475.

Phoenicopsis elongatus (Morris), in Walkom, 1924. p. 90.

Phoenicopsis elongatus (Morris) Seward, 1903, in Rigby, 1977. p. 321.

Loc.: Portion 42, Wivenhoe Parish, Bellevue Station, near Esk, SE.Q.

Fm.: Esk Fm. Age: Middle Triassic.

Remarks: The status of leaves previously referred to *Podozamites* and *Phoenicopsis* has been discussed by Retallack (1981). He erected the genus *Heidiphyllum* to accommodate these leaves. The leaves referred to *Phoenicopsis* by Walkom (1924) are poorly preserved and while it

is difficult to assign them confidently to any taxon, they appear to have affinities with the Ginkgoales. F1475 is tentatively referred to *Ginkgoites* sp.

Division CONIFEROPHYTA Order CONIFERALES Family ARAUCARIACEAE

araucarian (?) cone

Reg. No.: F9573.

araucarian (?) cone in Peters & Christophel, 1978. p. 3127, fig. 17.

Loc.: Lovell Downs Station 50 kms NW of Winton, 22°12'00'S and 142°31'30'E, W.C.Q. Fm.: Winton Fm. Age: Early late Cretaceous (Albian-Cenomanian).

Family PODOCARPACEAE Podocarpus (sect. Dacrycarpus) sp.

Reg. No.: F2833.

Podocarpus (sect. Dacrycarpus) sp., in Selling, 1950. p. 555, 561. pl. 2, fig. 15.

Loc.: Clay Pit, Dinmore, SE.Q.

Fm.: Redbank Plains Fm. Age: Paleocene.

Family TAXOD1ACEAE

Austrosequoia wintonensis Peters & Christophel, 1978.

Reg. No.: F9509. HOLOTYPE.

Austrosequoia wintonensis Peters & Christophel, 1978. pp. 3119-28, fig. 2, 6, 13c.

Loc.: Lovell Downs Station, 50 kms NW of Winton, 22°12'00'S, 142°31'30'E, W.C.Q. Fm.: Winton Fm. Age: Early late Cretaceous (Albian-Cenomanian).

Reg. No.: F9510. PARATYPE.

Austrosequoia wintonensis Peters & Christophel, 1978. pp. 3119-28, fig. 3, 6, 13c.

Loc.: As for F9509.

Fm.: Winton Fm. Age: Early late Cretaceous (Albian-Cenomanian).

Reg. No.: F9511. PARATYPE.

Austrosequoia wintonensis Peters & Christophel, 1978. pp. 3119-28, figs. 4, 5, 6, 13c.

Loc.: As for F9509.

Fm.: Winton Fm. Age: Early late Cretaceous (Albian-Cenomanian).

Reg. No.: F9512, PARATYPE.

Austrosequola wintonensis Peters & Christophel, 1978. pp. 3119-28, figs. 6, 7, 13c.

Loc.: As for F9509.

Fm.: Winton Fm. Age: Early late Cretaceous

(Albian-Cenomanian).

Family VOLTZIACEAE

Heidiphyllum elongatum (Motris), Retallack, 1981

Reg. No.: F1469.

Podozamites lanceolatus (?) (Lindley & Hutton), in Walkom, 1924. p. 88, pl. 21, fig. 3A.

Loc.: Portion 42, Wivenhoc Parish, near Esk.

Fm.: Esk Fm. Age: Middle Triassic.

Remarks: See remarks for *Phoenicopsis* elongatus. The 'Podozamites' leaves figured by Walkom (1924) are probably young leaves of Heidiphyllum elongatum (Morris) Retallack 1981.

Coniferales incertae sedis gymnospermous seed

Reg. No.: F1469.

gymnospermous seed in Walkom, 1924, p. 90, pl. 21, fig. 3C.

Loc.: Portion 42, Wivenhoe Parish, near Esk, SE O

Fm.: Esk Fm. Age: Middle Triassic.

Division ANTHOPHYTA Class DICOTYLEDONAE Order MYRTALES Family MYRTACEAE

cf. Eucalyptus resinifera Smith 1790

Reg. No.: F6990.

cf. Eucalyptus resinifera, in Wood, 1972, p. 331.

Loc.: Maroochydore, 175 feet south of BM19418, two miles west, of the present coastline and the mouth of the Maroochy River and 475 feet southwest of the Maroochydore River, SE.Q.

Fm.: Age: Holocene.

? Eucalyptus sp.

Reg. No.: F2866

? Eucalyptus sp., in Hill et al., 1970. pl. Cz 12, fig. 6.

Loc.: Clay Pit, Dinmore, SE.Q.

Fm.: Redbank Plains Fm. Age: Paleocene.

Dicotyledonae Incertae sedis

dicotyledonous leaves

Reg. No.: F2823.

dicotyledonous leaves, in Hill et al., 1970. pl. Cz 12, fig.

Loc.: Clay Pit, Dinmore SE.Q.

Fm.: Redbank Plains Fm. Age: Paleocene.

Reg. No.: F6553.

dicotyledonous leaves, in Hill et al., 1970. pl. Cz 12, fig. 2.

Loc.: As for F2823.

Fm.: Redbank Plains Fm. Age: Paleocene.

angiosperm leaf

Reg. No.: F9515.

angiosperm leaf, in Peters and Christophel, 1978. p. 3127, fig. 19.

Loc.: Lovell Downs Station, 50 kms NW of Winton, 22°12'00'S, 142°31'30'E.

Fm.: Winton Fm. Age: Early late Cretaceous (Albian-Cenomanian).

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LITERATURE CITED

Anderson, H.M. and Anderson, J.M. 1970. A preliminary review of the uppermost Permian, Triassic and lowermost Jurassic of Gondwandland. *Palaeont. afr.* Supple. 13, 22 p.

- CARRUTHERS, W., 1872. Notes on fossil plants from Queensland, Australia. Quart, J. geol. Soc. Lond. 28: 351-360.
- DAY, R.W., WHITAKER, W.G., MURRAY, C.G., WILSON, I.H. and GRIMES, K.G. 1983, Queensland Geology. A companion volume to the 1:2,500,000 scale geological map (1975). Puhls. Geol. Surv. Qd ; 383.
- DE VIS, C.W., 1911. On some Mesozoic fossils. *Ann. Qd Mus.* 10: 1-11, pls. 2-4.
- Du Tort, A.L., 1927. The fossil flora of the Upper Karoo Beds. Ann. S. Afr. Mus. 22: 289-420.
- FEISTMANTEL, O., 1890. Geological and palaeontological relations of the coal and plant bearing beds of Mesozoic age in eastern Australia and Tasmania, Mem. Geol. Surv. N.S.W., Palaeontology 3.
- FRENGUELLI, J., 1943. Resena critica de los generos atribuidos a la 'Serie de *Thinnfeldia'*. Revta Mus. La Plata 2 Paleont. 12: 225-336.
 - 1944. Las especies del genero 'Zuberia' en la Argentina. An. Mus. La. Plata (N.S.) Paleont B2 (1): 1-30.
 - 1946. Contribuciones al conocimiento de 33, La Flora del Gondwana Superior en la Argentina. Notas Mus. La Plata 2 (87): 101-127.
- GOULD, R.E. and SHIBAOKA, M. 1980. Some aspects of the formation and petrographic features of Coal Members in Australia, with special reference to the Tasman Orogenic Zone. Coal Geology (2) 1: 1-29.
- HARRIS, T.M., 1931. The fossil flora of Scoresby Sound, East Greenland. Part 1. Cryptogama (exclusive of Lycopodiales) Medd. Grouland 85 (2): 1-102.
- HERBST, R., 1974. Note on two Triassic plants from Queensland, Australia. *Proc. R. Soc. Qd* 85: 79-84, pls. 9, 10.
 - 1977. Sobre Marattiales (Fillcopsidae) Triasicas de Argentina y Australia. Parte 1. El genero Asterotheca. Ameghiniana 14: 1-18.
 - 1978. Revision de las especies australasicas de Cladophlebis (Bgt.). Facena 2: 3-28.
 - 1979. Review of the Australia fossil Dipteridaceae. Proc. Linn. Soc. N.S. W. 103: 7-21.
- HILL, D., PLAYFORD, G. and WOODS, J.T., (eds.) 1965. "Trigssic Fossils of Queensland" (Brisbane: Qd. Palaeontog. Soc.)
 - 1966. 'Jurassic Fossils of Queensland' (Brisbane: Qd Palaeontog, Soc.)
 - 1970. 'Cainozoic Fossils of Queensland' (Brisbane: Qd Palaeontog, Soc.)
- International Code of Botanical Noncentiature 1972 adopted by the 11th International Botanical Congress, Seattle (1969) 426 pp.
- JONES, O.A. and DE JERSEY, N.J. 1947. The Flora of

- the Ipswich Coal Measures morphology and floral succession. *Pap. Dep. Geol. Univ. Qd* 3 (3): 1–88.
- OISHI, S. and YAMASITA, K. 1936. On the Tossil Dipteridaceae. J. Fac. Sci. Hokkaido Imp. Univ. ser. 4 (3): 135-184.
- MAHESHWARI, H.K., 1972. Lelstotheca: a new name for Stellotheca Surange & Prakash. Geophytology 2 (1): 106.
 - 1974. Palaeozoic Lycopsida and Sphenopsida. In SURANGE, K.R., LAKHANPAL, R.M., and BHARADWAI, C. (eds.) 'Aspects and Appraisal of Indian Palaeobolany' (Lucknow: Birbal Sahni Institute of Palaeobotany).
- PANT, D.D., 1957. The classification of gymnospermous plants. *Palaeobotanist* 6: 65-70.
- Peters, M.D. and Christophel, D.C. 1978. Austrosequoia wintonensis a new taxodiaccous cone from Queensland, Australia. Can. J. Bot. 56: 3119-28.
- RETALLACK, G.J., 1977. Reconstructing Triassic vegetation of eastern Australasia: a new approach for the biostratigraphy of Gondwanaland. Alcheringa 1: 247-77. Alcheringa fiche 1, G1-J17.
 - 1981. Middle Triassic megafossil plants from Long. Gully, near Oteinatata, North Island, New Zealand. Jour. Roy. Soc. N.Z. 11(3):
- RETALLACK, G.J., GOULD, R.E. and RUNNEGAR, B. 1977. Isotopic dating of a middle Triassic megafossil flora from near Nymboida, northeastern New South Wales. *Proc. Linn. Soc. N.S.W.* 101 (2): 77-113.
- RIGBY, J.F., 1977. New collections of Triassic plants from the Esk Formation, Southeast Queensland. Qd Govt. Min. J. 78: 320-5.
- SELLING, O.H., 1950. Some Tertiary plants from Australia. Preliminary report. Svensk. Bot. Tidski 44 (4): 551-61.
- SEWARD, A.C., 1903. Fossil Floras of Cape Colony. Ann. S. Afr. Mus. 4 (1): 1-122.
- SCAGEL, R.F., BANDONI, R.J., ROUSE, G.E., SCHOFIELD, W.B., STEIN, J.R. and TAYLOR, T.M.C. 1965. 'An Evolutionary Survey of the Plant Kingdom' (Wadsworth Publishing Company, Inc. Belmont, California).
- Surange, K.R. and Prakash, G. 1962. Studies in the Glossopteris flora of India 12. Stellotheca robusta nov. comb.: A new equisetaceous plant from the lower Gondwanas of India. Palaeobotanist 9: 49-52.
- SHIRLEY, J., 1920. A new fossil plant. Qd Nat. 2 (2): 82-3.
- TENISON-WOODS, J.E., 1883. On the Coal Flora of Australia. Proc. Linn. Soc. N.S.W. 8 (1): 37-167.

- THOMAS, H.H., 1933. On some Pteridospermous Plants from Mesozoic Rocks of South Africa. *Philos. Trans.*, London. 222B: 193-265.
- Townrow, J.A., 1957. On *Dicroidium*, probably a pteridospermous leaf, and other leaves now removed from the genus. *Trans. Geol. Soc. S. Afr.* 60: 21-56.
 - 1962. On *Pteruchus*, a microsporophyll of the Corystospermaceae. *Brit. Mus. (Nat. Hist.) Geol.* 6: 289-320.
- TURNER, S., 1984. An enigmatic Triassic fossil plant from the Crater, Rewan, Queensland. *Qd Nat.* 24 (5-6): 90-3.
- WALKOM, A.B., 1916(a). Note on Nilssonia mucronatum (De Vis) from the Cretaceous of Western Queensland. Mem. Qd Mus. 5: 231-2, pl. 24.
 - 1916. Notes on a specimen of Annularia from near Dunedoo, New South Wales. Mem. Qd Mus. 5: 233-4.
 - 1917. Mesozoic Floras of Queensland. Part 1 continued. The flora of Ipswich and Walloon Series (1) Filicales, etc. *Publs. Geol. Surv. Qd* 257: 1-67.

- 1917. The Mesozoic Floras of Queensland, Part 1.Concluded (d) Ginkgoales (e) Cycadophyta (f)Coniferales. Publs. Geol. Surv. Qd 259: 1-49.
- 1919. Mesozoic Floras of Queensland. Parts 3 and 4. The floras of the Burrum and Styx River. *Publs. Geol. Surv. Qd* 263: 1-77.
- 1921. On a specimen of Noeggerathiopsis from the lower Coal Measures of New South Wales. Proc. Linn. Soc. N.S. W. 46: 374-5.
- 1924. On fossil plants from Bellevue, near Esk. Mem. Od Mus. 8 (1): 72-92.
- 1928. Fossil plants from the Esk District, Queensland, *Proc. Linn. Soc. N.S.W.* 53 (4): 458-68.
- 1938. A brief review of the relationships of the Carboniferous and Permiau Floras of Australia. Cr. Cong. Strat. Curbon. Heerlen 1935: 1335-42.
- Webb, J.A., 1982. Triassic species of *Dictyophyllum* from Eastern Australia. *Alcheringa* 6: 79-91.
 - 1983. A new plant genus, possibly a marattialean fern from the Middle Triassic of easteru Australia. Mem. Ass. Australas. Palaeontols 1: 363-71.
- WOOD, P.A., 1972. A possible Holocene shoreline at Maroochydore, Queensland. Qd Govt. Min. J. 73: 321.

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PLATE I

Fig. 1. Holotype of 'Noeggerathiopsis tryoni Shirley, 1920' (X 1.5).

Fig. 2. Holotype of Nilssonia mucronatum (De Vis) Walkom, 1916 (X 1).

1.



